In the Claims

Please amend Claims 1, 5 and 12-13 as follows:

1. (Currently amended) In a wireless, mobile access digital data network having a plurality of mobile and fixed nodes, and a plurality of agents/routers for interfacing said mobile nodes with said data network, a method of communicating data between a mobile node and a mobile or fixed correspondent node in said network, comprising:

establishing a communication link between said mobile node and said network via a first one of said agents/routers;

establishing a communication link between said correspondent node and said network via a second one of said agents/routers;

establishing data communications between said mobile node and said correspondent node via a first data route including said first and second agents/routers;

predicting the future location of said mobile node relative to said first agent/router and a third agent/router using a network layer data communication protocol;

determining based on said prediction when said communication link between said mobile node and said network should be transferred from said first agent/router to said third agent/router;

establishing a second data route for data communications between said mobile node and said correspondent node including said second and third agents/routers; and

transferring said communication link between said mobile node and said network

from said first agent/router to said third agent/router.

2. (Original) The method of claim 1 wherein predicting the future location of said mobile node comprises using deterministic prediction.

3. (Original) The method of claim 1 wherein predicting the future location of said mobile node comprises using stochastic prediction.

4. (Original) The method of claim 1 wherein predicting the future location of said mobile node comprises using adaptive prediction.

5. (Currently amended) The method of claim 1 wherein predicting the future location of said mobile node comprises ~~transparently~~ predicting the future location of said mobile node using a selected variable in the ~~L3~~ network layer.

6. (Original) The method of claim 5 wherein said variable is packet latency.

7. (Original) The method of claim 1 wherein said data communication between said mobile node and said correspondent node is real-time interactive multimedia communication.

8. (Original) The method of claim 7 wherein said real-time interactive multimedia communication between said mobile node and said correspondent node is voice over IP (VoIP) data communication.

9. (Original) The method of claim 1 wherein said data network is a third or beyond generation all-IP, wireless, mobile access IP-based data network conforming to IMT2000.

10. (Original) The method of claim 1 wherein said data network is a third or beyond generation all-IP, wireless, mobile access IP-based data network conforming to Mobile IP

version 4.

11. (Original) The method of claim 1 wherein said data network is a third generation, wireless, mobile access IP-based data network conforming to Mobile IP version 6.

12. (Currently amended) In a third or beyond generation all-IP, wireless, mobile access, IP-based data network having a core network, a mobile node, a fixed or mobile correspondent node, and a mobile IP backbone comprising a plurality of routers/agents for interfacing said mobile nodes to the core network, a method of dynamically changing the network data routing between said mobile node and said correspondent node, comprising:

using a network layer communication protocol, predicting ~~the~~ a mobility parameter value of said mobile node relative to a first fixed agent or router ~~comprising~~ having a network connection ~~for~~ with said mobile node;

comparing said predicted mobility parameter value to a predetermined threshold value;

if said predicted mobility parameter value meets or exceeds said threshold value,

locating a second fixed agent or router;

pre-registering said mobile node with said second fixed agent or router;

pre-establishing a new network data route between said mobile node and said correspondent node via said second fixed agent or router;

then switching said mobile node's network connection from said first fixed agent or router to said second fixed agent or router. Book

13. (Currently amended) A wireless, mobile node device for use in a third or beyond generation all-IP, wireless, mobile access, IP-based data network, comprising:

electronic circuitry and software for establishing a network connection and communicating data over said network via a first fixed node of said network;

means for predicting ~~the~~ a mobility parameter value of said mobile node with respect to said first fixed node;

means for comparing said predicted mobility parameter value with a new value discovered; and

means for taking a desired action if said predicted mobility parameter value meets or exceeds said discovered new value.

14. (Original) The device of claim 13 wherein said means for taking a desired action comprises:

means for locating a second fixed agent or router;

means for pre-registering said mobile node with said second fixed agent or router;

means for pre-establishing a new direct network data route between said mobile node and said correspondent node via said second fixed agent or router; and

means for switching said mobile node's network connection from said first fixed agent or router to said second fixed agent or router.